Docket: 2050/1 D1


## ABSTRACT

The use of an intravascular cooling element to induce hypothermia in connection with a medical procedure. According to a first aspect of the present, invention, a coronary bypass procedure is conducted in which a patient's blood is oxygenated with the patient's lungs and in which blood is circulated using the patient's heart or using an intracorporeal pump. The procedure preferably comprises: (a) positioning a heat transfer element in a blood vessel of a patient; (b) cooling the body of the patient to less than 35°C, more preferably 32±2° C, using the heat transfer element; and (c) forming a fluid communicating graft between an arterial blood supply and the coronary artery. The body of the patient is preferably heated to about 37 °C using the heat transfer element subsequent to the step of forming the fluid communicating graft. According to a further aspect of the invention, a hypothermic medical procedure is provided while a patient is in a conscious or semiconscious state, comprising (a) administering a beta-blocking drug to the patient; (b) delivering a heat transfer element to a blood vessel of the patient; and (c) cooling a region of the patient or the body of the patient to less than 35°C using the heat transfer element.